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PATENT APPLICATION  
Docket No. 2409.3273.2US



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Geoffrey S. Martin et al.

Serial No.: 09/139,705

Filing Date: August 25, 1998

For: MULTIPLE LUMEN CATHETER

Group Art Unit  
3734

SUPPLEMENTAL PRELIMINARY AMENDMENT

The Honorable Commissioner of Patents  
and Trademarks  
Washington, D.C. 20231

Sir:

Prior to an examination on the merits, but subsequent to entry of the Preliminary Amendment dated August 25, 1998, kindly amend the above-captioned application as follows:

IN THE CLAIMS:

Amend the following claims as indicated:

(Amended) A triple lumen catheter comprising:

- a. an outer tube having a proximal end and a distal end;
- b. an inner tube having a proximal end and a distal end and defining therewithin a first lumen, said inner tube having an outer diameter less than the inner diameter of said

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outer tube, said inner tube being disposed within said outer tube to define an interior space between the outside of said inner tube and the inside of said outer tube;

c. a first septum extending from a first point on the outside of said inner tube to a first point on the inside of said outer tube;

d. a second septum extending between a second point on said outside of said inner tube and a second point on said inside of said outer tube, said first septum and said second septum thereby separating said interior space into a second lumen located on one side of said first septum, said inner tube, and said second septum, and a third [second] lumen located on the opposite side[s] of said first septum, said inner tube, and said second septum;

e. a frustoconical distal tip section [located] at said distal end of said outer tube [and] enclosing said distal end of said inner tube, the [said] outer wall[s] of said distal tip section tapering radi[c]ally inwardly from said distal end of said outer tube into engagement [to merge] with said inner tube at the free [said] distal tip [end] thereof, said outer wall of said distal tip section [and] terminating[e] at said free distal tip of said inner tube and thereat defining an open apex of said distal tip section through which said first lumen communicates with the exterior of said distal tip section [outer tube]; and

f. plural openings formed through said outer tube at said distal end thereof, [through which] each of said second lumen and said third lumen[, respectively,] communicat[e]ing with the exterior of said outer tube through respective of said openings.

<sup>25</sup>  
Claim ~~1~~, line 1, change "1" to --2--.

<sup>26</sup>  
Claim ~~4~~, line 1, change "1" to --2--.

<sup>28</sup>  
Claim ~~6~~, line 1, change "4" to --5--.

<sup>29</sup>  
Claim ~~7~~, line 1, change "1" to --2--.

<sup>30</sup>  
Claim ~~8~~, line 1, change "6" to --7--.

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(Amended) A catheter as recited in Claim 5 [4], wherein:

a. said thickness of said first septum [and said thickness of said second septum]  
is equal to the thickness of the wall of said inner tube; and

b. said thickness of said second septum is equal to the thickness of the wall of  
said inner tube.

<sup>32</sup>  
Claim ~~10~~, line 1, change "4" to --5--.

<sup>33</sup>  
Claim ~~11~~, line 1, change "1" to --2--.

<sup>34</sup>  
Claim ~~12~~, line 1, change "10" to --2--.

<sup>35</sup>  
Claim ~~13~~, line 1, change "1" to --2--.

REMARKS

The above-listed amendments to the claims serve to recite the inventive combination with enhanced clarity. The amendments are supported by the specification as originally filed.

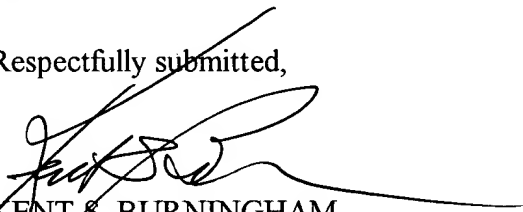
Accordingly, entry thereof is respectfully requested.

An examination on the merits is respectfully requested of Claims 2-21 as amended and presented herein.

Should the Examiner encounter any impediment to a prompt allowance of this application, and should that impediment be susceptible to a resolution through a telephone conversation, the Examiner is respectfully requested to initiate such a telephone conference with the undersigned.

DATED this 7th day of February 1999.

Respectfully submitted,

  
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Claim ~~14~~<sup>36</sup>, line 1, change "1" to --2--.

Claim ~~15~~<sup>37</sup>, line 1, change "1" to --2--.

Claim ~~16~~<sup>38</sup>, line 1, change "1" to --2--.

~~17~~<sup>39</sup> (Amended) A triple lumen catheter comprising:

a. a catheter body comprising:

i. an outer tube having a proximal end and a distal end;

ii. an inner tube having a proximal end and a distal end and defining therewithin a first lumen, said inner tube having an outer diameter less than the inner diameter of said outer tube, said inner tube being disposed within said outer tube to define an interior space between the outside of said inner tube and the inside of said outer tube;

iii. a first septum extending from a first point on the outside of said inner tube to a first point on the inside of said outer tube;

iv. a second septum extending between a second point on said outside of said inner tube and a second point on said inside of said outer tube, said first septum and said second septum thereby separating said interior space into a second lumen located on one side of said first septum, said inner tube, and said second septum, and a third [second] lumen located on the opposite side[s] of said first septum, said inner tube, and said second septum;

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b. a frustoconical distal tip section [located] at said distal end of said outer tube [and] enclosing said distal end of said inner tube, the [said] outer wall[s] of said distal tip section tapering radially inwardly from said distal end of said outer tube into engagement [to merge] with said inner tube at the free [said] distal tip [end] thereof, said outer wall of said distal tip section [and] terminat[e]ing at said free distal tip of said inner tube and thereat defining an open apex of said distal tip section through which said first lumen communicates with the exterior of said distal tip section [outer tube]; and

c. access means attached to said proximal end of said outer tube and said proximal end of said inner tube for affording [providing] fluid communication individually with said first lumen, said second lumen, and said third lumen.

<sup>41</sup>  
Claim ~~19~~, line 1, change "said" (first occurrence) to --the--; and  
line 2, change "said" (first occurrence) to --the--.

<sup>43</sup>  
Claim ~~21~~, paragraph (a), line 3, before "bulbous" insert --at the center thereof--,  
and  
delete "middle".

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